## **WEST Search History**

DATE: Monday, May 13, 2002

<u>Set Name</u> side by side	Query	<u>Hit Count</u>	<u>Set Name</u> result set
DB=USPT,P	GPB,JPAB,EPAB,DWPI; PLUR=YES; OP=OP	8	
. L4	L3 and wilms	1	L4
L3	hla-A2.1 or hla-a0201	135	L3
L2	L1 and wilms	10	L2
L1	(stauss)[IN] OR (gao)[IN]	3542	L1

END OF SEARCH HISTORY

(FILE 'HOME' ENTERED AT 10:25:06 ON 13 MAY 2002)

 FILE 'MEDLINE, CAPLUS, EMBASE, BIOSIS' ENTERED AT 10:25:20 ON 13 MAY 2002

 L1
 2814 S STAUSS H?/AU OR GAO L?/AU

 L2
 3 S L1 AND (GATA OR WT-1)

 L3
 3 L1 AND (GATA-1 OR WT-1)

 L4
 3 DUP REM L3 (0 DUPLICATES REMOVED)

=> 5 HLA-A2.1 or HLA-A0201 L5 1283 HLA-A2.1 OR HLA-A0201

> s 15 and Wilms L6 11 L5 AND WILMS

8

=> dup rem 16 PROCESSING COMPLETED FOR L6 L7 7 DUP REM L6 (4 DUPLICATES REMOVED)

=> s 17 not 14 L8 5 L7 NOT L4

=> dus 18 1-5 ibib abs kwic DUS IS NOT A RECOGNIZED COMMAND The previous command name entered was not recognized by the system. For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>).

=> dis 18 1-5 ibib abs kwic



(FILE 'HOME' ENTERED AT 10:25:06 ON 13 MAY 20 FILE 'MEDLINE, CAPLUS, EMBASE, BIOSIS' ENTERED AT 10:25:20 ON 13 MAY 2002 2814 S STAUSS H?/AU OR GAO L?/AU 3 S L1 AND (GATA-0 R WT-1) 3 S L1 AND (GATA-1 OR WT-1) L1 L2 L3 3 DUP REM L3 (0 DUPLICATES REMOVED) L4 s HLA-A2.1 or HLA-A0201 1283 HLA-A2.1 OR HLA-A0201 L5 => s 15 and Wilms L6 11 L5 AND WILMS L6 => dup rem 16 PROCESSING COMPLETED FOR L6 7 DUP REM L6 (4 DUPLICATES REMOVED) L7 => s 17 not 14 L8 5 L7 NOT L4 L8 => dus 18 1-5 ibib abs kwic DUS IS NOT A RECOGNIZED COMMAND The previous command name entered was not recognized by the system. For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>). => dis 18 1-5 ibib abs kwic ANSWER 1 OF 5 MEDLINE MEDLINE 2000197865 MEDLINE 20197865 PubMed ID: 10733485 Selective elimination of leukemic CD34(+) progenitor cells by cytotoxic T lymphocytes specific for WT1. Gao L; Bellantuono I; Elsasser A; Marley S B; Gordon M Y; ACCESSION NUMBER: DOCUMENT NUMBER : TITLE: AUTHOR :

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Coldman J M; Stauss H J Department of Immunology, Imperial School of Medicine, CORPORATE SOURCE: Hammersmith Hospital, London, UK. BLOOD, (2000 Apr 1) 95 (7) 2198-203. Journal code: A8G; 7603509. ISSN: 0006-4971. SOURCE : PUB. COUNTRY: United States Journal; Article; (JOURNAL ARTICLE) Abridged Index Medicus Journals; Priority Journals LANGUAGE : FILE SEGMENT: ENTRY MONTH: 200004 ENTRY DATE: AB

 

 SEGMENT:
 Abridged index Medicus Journals; Priority Journals

 Y MONTH:
 200004

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 Entered Medine:
 20000427

 Hematologic malignancies such as acute and chronic myeloid leukemia are characterized by the malignant transformation of immature CD34(+)

 progenitor cells.
 Transformation is associated with elevated expression of the Wilm's tumor gene encoded transcription factor (WTI). Here we demonstrate that WTI can serve as a target for cytotoxic T lymphcytes (CTL) with exquisite specificity for leukemic progenitor cells.

 HLA-A0201 restricted CTL specific for WTI kill leukemia (CML), whereas colony formation by normal CD34(+) progenitor cells is unaffected. Thus, the tissue-specific transcription factor WTI is an ideal target for CTL-mediated purging of leukemic progenitor cells in vitro and for antigen-specific therapy of leukemia and other WTI-expressing malignancies in vivo.

 in vivo. AB

in vivo. . . . demonstrate that WT1 can serve as a target for cytotoxic T lymphocytes (CTL) with exquisite specificity for leukemic progenitor cells. HLA-A0201- restricted CTL specific for WT1 kill leukemia cell lines and inhibit colony formation by transformed CD34(+) progenitor cells isolated from.

\*Antigens, CD34: AN, analysis Blotting, Western \*Bone Marrow Purging: MT, methods Child Child DNA-Binding Proteins: AN, analysis \*DNA-Binding Proteins: IM, immunology Genes, Wilms Tumor Hematopoietic Stem Cells: CH, chemistry \*Hematopoietic Stem Cells: IM, immunology Hematopoietic Stem Cells: PA, pathology

ENTRY DATE:

\*Leukemia, Myeloid,. . ANSWER 2 OF 5 MEDLINE MEDLINE PubMed ID: 10663572 ACCESSION NUMBER: 2000130143 DOCUMENT NUMBER: 20130143 Human cytotoxic T-lymphocyte responses specific for peptides of the wild-type Wilms' tumor gene (WT1 TITLE: peptides of the wild-type wilms' tumor gene (wil ) product. Oka Y; Elisseeva O A; Tsuboi A; Ogawa H; Tamaki H; Li H; Oji Y; Kim E H; Soma T; Asada M; Ueda K; Maruya E; Saji H; Kishimoto T; Udaka K; Sugiyama H Department of Molecular Medicine, Osaka University Medical School, 2-2, Yamada-Oka, Suita City, Osaka 565-0871, Japan. IMMUNOGENETICS, (2000 Feb) 51 (2) 99-107. Journal code: GI4; 0420404. ISSN: 0093-7711. United States AUTHOR : CORPORATE SOURCE: SOURCE PUB. COUNTRY: United States Journal; Article; (JOURNAL ARTICLE) English Priority Journals LANGUAGE : FILE SEGMENT: ENTRY MONTH:

200003

Y MONTH: 200003 Y DATE: Entered STN: 20000320 Last Updated on STN: 20000320 Entered Medline: 20000309 The product of the Wilms' tumor gene WTI is a transcription factor overexpressed not only in leukemic blast cells of almost all patients with acute myeloid leukemia, acute lymphoid leukemia, and chronic myeloid leukemia, but also in various types of solid tumor cells. Thus, it is suggested that the WTI gene plays an important role in both leukemogenesis and tumorigenesis. Here we tested the potential of WTI to serve as a target for immuncherapy against leukemia and solid tumors. Pour 9-mer WTI peptides that contain HLA-A2.1 -binding anchor motifs were synthesized. Two of them, Dbl26 and WH187, were determined to bind to HLA-A2.1 molecules in a binding assay using transporter associated with antigen

processing-deficient T2 cells. Peripheral Blood mononuclear cells from an HLA-A2.1-positive healthy donor were repeatedly sensitized in vitro with T2 cells pulsed with each of these two WT1 peptides, and CD8(+) cytotoxic T lymphocytes (CTLs) that specifically lyse WT1 peptide-pulsed T2 cells in an HLA-A2. 1-restricted fashion were induced. The CTLs also exerted specific lysis against WT1-expressing, HLA-A2.1 -positive leukemia cells, but not against WT1-expressing, HLA-A1.1-negative leukemia cells, or WT1-nonexpressing, HLA-A2.1-hinding anchor moe (WT1) product. The product of the Wilms' tumor gene WT1 is a transcription factor overexpressed not only in leukemic blast cells of almost all patients with acute. . . of WT1 to serve as a target for immunotherapy against leukemia and solid tumors. Four 9-mer WT1 peptides that contain HLA-A2.1-binding anchor motifs were synthesized. Two of them, Dbl26 and WH187, were determined to bind to HLA-A2.1-binding anchor were repeatedly sensitized in vitro with T2 cells pulsed with each of these two WT1 peptides, and CD8(+) cytotoxic T lymphocytes (CTLs) that specifically lyse WT1 peptide-pulsed T2 cells in an HLA-A2.1-restricted fashion were induced. The CTLs also exerted specific lysis against WT1-expressing, HLA-A2.1-negative leukemia cells, but not against WT1-expressing, HLA-A2.1-negative leukemia cells, or WT1-nonexpressing, HLA-A2.1 -positive B-ly processing-deficient T2 cells. Peripheral blood mononuclear cells from an ΤI ΔR L8 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2002:210063 CAPLUS WT1 as a novel target antigen for cancer immunotherapy Oka, Y.; Tsuboi, A.; Elisseeva, O. A.; Udaka, K.; TITLE: AUTHOR (S) Sugiyama, H. Deapartment of Molecular Medicine, Osaka University Medical School, Suita City, 565-0871, Japan Current Cancer Drug Targets (2002), 2(1), 45-54 CODEN: CCDTB9; ISSN: 1568-0096 CORPORATE SOURCE: SOURCE : PUBLISHER : Bentham Science Publishers Ltd. Journal; General Review DOCUMENT TYPE: UAGE: English Wild-type Wilms' tumor gene WT1 is expressed at high levels not only in most of acute myelocytic, acute lymphocytic, and chronic myelocytic leukemia, but also in various types of solid tumors including lung cancer. The authors tested the ability of the gene product (WT1) to serve as a target antigen for tumor-specific immunotherapy both in human in vitro system and mouse in vivo system. In the latter, the authors can evaluate the efficacy and the side effects of WT1 vaccination in vivo. In the human in vitro system, two WT1 peptides that contain HLA-A2.1 binding anchor motifs were detd. to bind to HLA-A2.1 mols. Peripheral blood mononuclear cells (PBMC) from an HLA-A2.1-pos. donor were repeatedly stimulated in vitro with TAP-deficient T2 cells pulsed with each of these two peptides, and CD8-pos. cytotoxic T lymphocytes LANGUAGE : English AB veries (FBMC) FibMC in Min AMAR 12-post Confor were repeatedly stimulated in vitro with TAP-deficient T2 cells pulsed with each of these two peptides, and CD8-post cytotoxic T lymphocytes (CTLs) that specifically lyse WT1-expressing, HLA-A2. 1-post tumor cells were induced. Other groups also have succeeded in generating CTLs which specifically lyse WT1-expressing leukemia cells, and which do not inhibit colony-formation of normal hematopoietic cells that express WT1 at physiol. levels. In the mouse in vivo system, immunization of CSTBL/6 mice with one WT1 peptide with relatively high binding affinity for H-2Db mols., which contain H-2Db binding anchor motifs, induced CTLs, which specifically lysed WT1-expressing tumor cells in an H-2Db-restricted manner. Furthermore, mice immunized with the WT1 peptide (peptide'vaccination) or WT1 cDNA (DNA vaccination) rejected challenges by WT1-expressing normal organs by the induced CTLs. The WT1 protein has been identified as a novel tumor antigen and recent investigations provide a rationale for developing WT1-based adoptive T cell therapy and vaccination against various kinds of malignant neoplasms. REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT Wild-type Wilms' tumor gene WT1 is expressed at high levels not RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
Wild-type Wilms' tumor gene WT1 is expressed at high levels not only in most of acute myelocytic, acute lymphocytic, and chronic myelocytic leukemia, but also in various types of solid tumors including lung cancer. The authors tested the ability of the gene product (WT1) to serve as a target antigen for tumor-specific immunotherapy both in human in vitro system and mouse in vivo system. In the latter, the authors can evaluate the efficacy and the side effects of WT1 vaccination in vivo. In the human in vitro system, two WT1 peptides that contain HLA-A2.1 binding anchor motifs were detd. to bind to HLA-A2.1 mols. Peripheral blood mononuclear
cells (PBMC) from an HLA-A2.1-pos. donor
were repeatedly stimulated in vitro with TAP-deficient T2 cells pulsed with each of these two peptides, and CD8-pos. cytotoxic T lymphocytes (CTLs) that specifically lyse WT1-expressing, HLA-A2.
1-pos. tumor cells were induced. Other groups also have succeeded in generating CTLs which specifically lyse WT1-expressing leukemia cells, and which do not inhibit colony-formation of normal hematopoietic cells that express WT1 at physiol. levels. In the mouse in vivo system, immunization of C57BL/6 mice with one WT1 peptide with relatively high binding affinity for H-2DD mols., which contain H-2DD binding anchor motifs, induced CTLs, which specifically lysed WT1-expressing tumor cells in an H-2DD-restricted manner. Purthermore, mice immunized with the WT1 peptide (peptide vaccination) or WT1 cDNA (DNA vaccination) rejected challenges by WT1-expressing normal organs by the induced CTLs. The WT1 protein has been identified as a novel tumor antigen and recent investigations provide a rationale for developing WT1-based adoptive T cell therapy and vaccination against various kinds of malignant neoplasms. Transcription factors
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (WT1 (W AB IT (WT1 (Wilms' tumor suppressor 1); for cancer immunotherapy)

L8 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2001:904730 CAPLUS DOCUMENT NUMBER: 136:36345 TITLE:

Artificial antigen pre ing cells and methods of use thereof

Sadelain, Michel; Latouche, Jean-Baptiste Memorial Sloan-Kettering Cancer Center, USA PCT Int. Appl., 75 pp. CODEN: PIXKD2 INVENTOR (S) : PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: Patent English LANGUAGE : FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE WO 2001094944
 A2 20011213
 WO 2001-US17981 20010601
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CC, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MM, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 PRIORITY APPLN. INFO:
 BT the invention provides an artificial antigen presenting cell (AAPC) comprising a eukaryotic cell expressing an antigen presenting cell (AAPC) WO 2001094944 A2 20011213 WO 2001-US17981 20010601 The invention provides an artificial antigen presenting cell (AAPC) comprising a eukaryotic cell expressing an antigen presenting complex comprising a human leukocyte antigen (HLA) mol. of a single type, at lei one exogenous accessory mol. and at least one exogenous T cell-specific epitope. Methods of use for activation of T lymphocytes are also provided. Fibrohlasts were retrovirally transduced with an HLA-peptide complex and the accessory mols. B7.1, ICAM-1, and LPA-3. These AAPCs elicit strong stimulation and expansion of CTLs, and may be used in theraper, for a no. of direaser. least Histocompatibility antigens
 Histocompatibility antigens
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (HLA-A2.1; artificial antigen presenting cells expressing HLA class I, peptide, and accessory mols. for activation of cytotoxic T cells and adoptive immunotherapy) IT activation of cycotoxic r cells and adoptive immunotherapy) Antitumor agents (Wilms' tumor, artificial antigen presenting cells expressing HLA class I, peptide, and accessory mols. for activation of cytotoxic T cells and adoptive immunotherapy) IT kidney, neoplasm
(Wilms', inhibitors; artificial antigen presenting cells
expressing HLA class I, peptide, and accessory mols. for activation of
cytotoxic T cells and adoptive immunotherapy) īТ BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC. 2002:129944 BIOSIS PREV200200129944 ANSWER 5 OF 5 ACCESSION NUMBER : DOCUMENT NUMBER : PREV200200129944 Identification of a novel WT1 HLA A\*0201-restricted CTL epitope using whole gene in vitro priming. Smithgall, Molly (1); Misher, Linda (1); Spies, Greg (1); Cheever, Martin A. (1); Gaiger, Alexander (1) (1) Immunology, Corixa, Seattle, WA USA Blood, (November 16, 2001) Vol. 98, No. 11 Part 1, pp. 121a. http://www.bloodjournal.org/. print. Meeting Info.: 43rd Annual Meeting of the American Society of Hematology, Part 1 Orlando, Florida, USA December 07-11, 2001 TITLE : AUTHOR (S) : CORPORATE SOURCE: SOURCE Di nematology, Part Forlando, Fiorida, USA December 0.-11, 135N: 0006-4971. DOCUMENT TYPE: CONFERENCE LANGUAGE: English AB The Wilms tumor (WT1) protein is a self-protein recently identified as a candidate antigen for leukemia vaccine and T-cell therapy. The current study assessed the feasibility of generating WT1 specific T-cell responses using whole gene in vitro priming. The advantages of whole gene in vitro priming are 1) the entire spectrum of epitopes of a given protein is present, 2) selection and presentation of these naturally processed peptides are done by the antigen presenting cell. Monocyte derived dendritic cells (DC) of HLA A0201 positive normal donors were infected with replication-deficient recombinant adenovirus (Adeno) or vaccinia virus (Vac) expressing full length WT1. CD8+ T-cell cultures were restimulated every 7-10 days, alternating Adeno/WT1 infected autologous DC with Vac/WT1 infected DC. T cell responses were evaluated by measuring levels of interferon-gamma secretion by ELISPOT analysis in response to WT1 expressing target cells. After 4 stimulation cycles, CD8+ T cell lines that specifically, recognized WT1 transduced autologous DC with Vac/WT1 infected DC. T cells was documented by 1) antibody blocking experiments and 2) recognition of WT1 transduced fibroblasts derived from a second donor, who shares only the HLA 2 allele with the original donor. Recognition of HLA class I negative control transduced S62 cells. Using truncated WT1 retroviral constructs to transduce autologous fibroblasts the WT1 epitope vas localized to the first 92 N-terminal aminoacide of the WT1 protein. US# clone specifically recognized the Smer VLDPAPPGA (aa37-45), demonstrating that this WT1 peptides is a naturally processed HLA A0201 restricted epitope. The ability to generate WT1 specific CD8+ clone specifically recognized the Smer VLDPAPPGA (aa37-45), demonstrating that this WT1 peytide is a naturally processed peptides are done by the antigen presenting cell. Monocyte deriv 2001 ISSN: 0006-4971. DOCUMENT TYPE: IT

antigen presenting cell: immune system; dendritic cell: immune system; monocyte: blood and lymphatics, immune system

<pre>IT Chemicals &amp; Biochemicals HLA-A-0201; Wilms tumor protein [WT1]: expression GEN HLA A2 gene: allele; WT1 gene [Wilms tumor gene]: epitopes</pre>				
=> s rmfpnapyl L9 1 RMFPNAPYL				
=> dis 19 ibib abs				
L9 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2000:314730 CAPLUS DOCUMENT NUMBER: 132:33336 TITLE: Immunotherapy of cancer using epitopes of WT-1 and GATA-1 transcription factors INVENTOR(S): Stauss, Hans Josef, Gao, Liquan PATENT ASSIGNEE(S): Imperial College Innovations Limited, UK SOURCE: PCT Int. Appl., 93 pp. CODEN. PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English				
FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:				
PATENT NO. KIND DATE APPLICATION NO. DATE				
<ul> <li>WO 200026249 A1 2000511 WO 1999-GB3572 19991102</li> <li>W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, SE, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM</li> <li>RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG</li> <li>AU 9964797 A1 2000522 AD 1999-64797 19991102</li> <li>EP 1127068 A1 20010629 EP 1999-952682 19991102</li> <li>R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO</li> <li>PRIORITY APPLN. INFO:: W0 1999-GB3572 M 19981102</li> </ul>				
AB The authors disclose that the peptides RMFPARPYL or CMTWNQMNL are epitopes for cytotoxic T-cells recognizing WT-1 in an HLA-A2-restricted manner. In addn. the peptide is HLMPFPGPLL is a CTL epitope of human GATA-1 transcription factor. The peptides, and polynucleotides encoding them, may be useful as cancer vaccines. REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT				
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ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF LOGOFF? (Y)/N/HOLD:y	
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